

CLAIMS

What is claimed is:

1. A method for detecting the presence of FMDV in a sample,  
5 the method comprising:
  - (a) performing RT-PCR amplification of the sample using at least one primer pair selected from the group consisting of:
    - (i) SEQ ID NOs:16 and 17,
    - (ii) SEQ ID NOs:16 and 18,
    - 10 (iii) SEQ ID NOs:16 and 19, and
    - (iv) SEQ ID NOs:16 and 20,to produce an RT-PCR amplification result; and
  - (b) examining the RT-PCR amplification result of step (a) to detect for an amplification product of the primer pair, whereby a positive  
15 detection of the amplification product indicates the presence of FMDV in the sample.
2. The method of claim 1, wherein in step (b) a melting curve analysis is used to detect for an amplification product.  
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3. The method of claim 1, further comprising a step of extracting RNA from the sample prior to said step (a).
4. An isolated polynucleotide for detection of FMDV comprising  
25 SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, or SEQ ID NO:20.
5. A kit for detection of FMDV, comprising:
  - (a) at least one primer pair selected from the group consisting  
30 essentially of:
    - (i) SEQ ID NOs:16 and 17,
    - (ii) SEQ ID NOs:16 and 18,
    - (iii) SEQ ID NOs:16 and 19, and
    - (iv) SEQ ID NOs:16 and 20;
  - 35 (b) reverse transcriptase; and
  - (c) thermostable DNA polymerase.

6. A replication composition for use in performance of RT-PCR, comprising:
- (a) at least one primer pair selected from the group consisting essentially of:
- 5 (i) SEQ ID NOs:16 and 17,  
(ii) SEQ ID NOs:16 and 18,  
(iii) SEQ ID NOs:16 and 19, and  
(iv) SEQ ID NOs:16 and 20;  
(b) reverse transcriptase; and  
10 (c) thermostable DNA polymerase.
7. A tablet comprising the replication composition of claim 6.
8. A kit for detection of FMDV in a sample, comprising the  
15 tablet of claim 6.